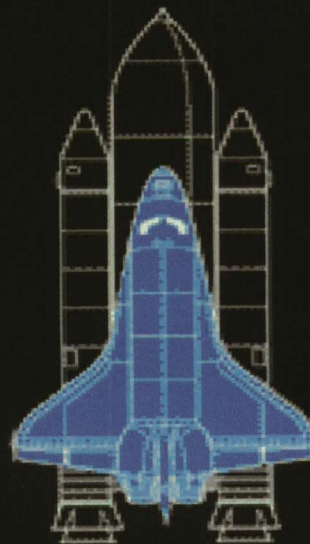


United Space Alliance, LLC

Vehicle Assembling Building Data Center Virtual Tour

Daniel D Hauge

04/17/2005

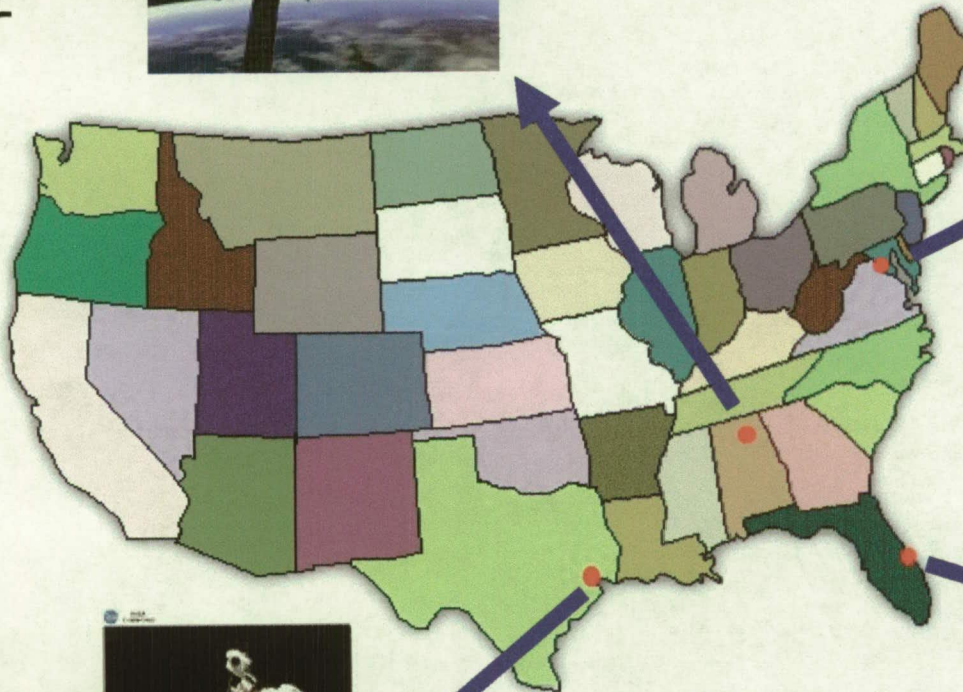


Who We Are

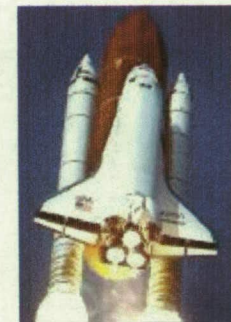
Marshall Space Center
Huntsville, AL



NASA HQ
Washington DC



Johnson Space Center
Houston, TX

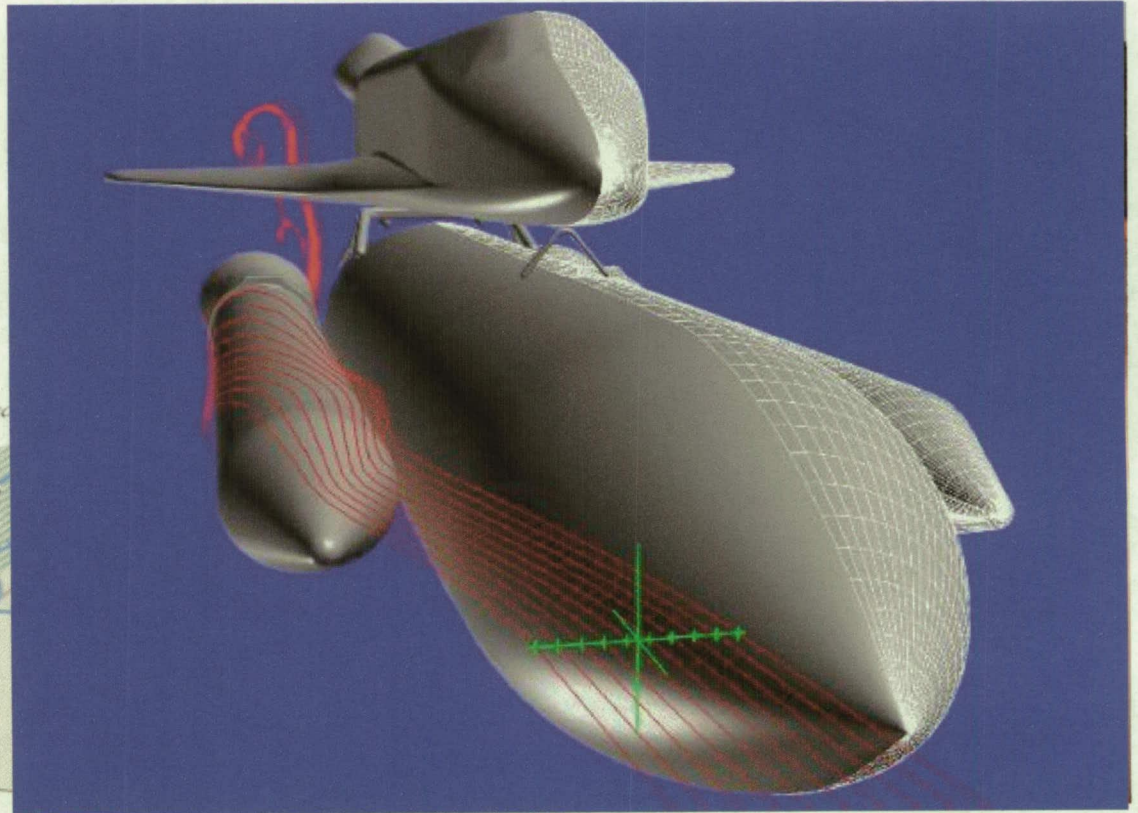


Kennedy Space Center
Cape Canaveral, FL

Who We Are

Marshall Space Center Huntsville, AL

- **Mission Design and Planning**
- **Responsible for Main Engine, External Tank and twin Solid Rocket Boosters**



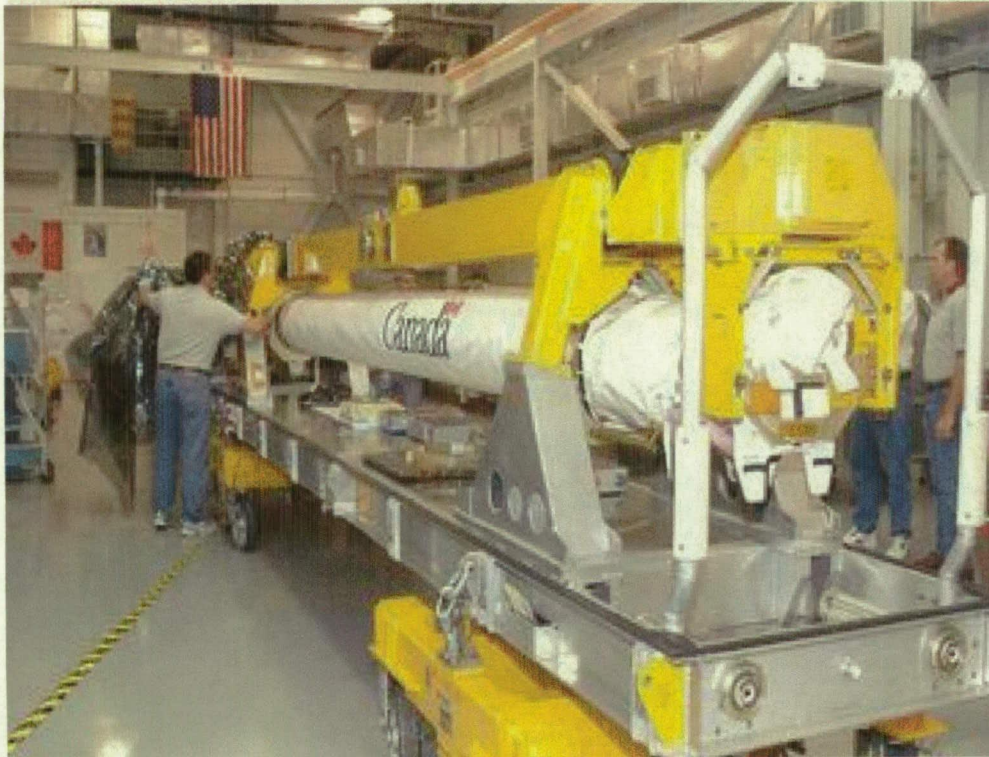
Who We Are



- Astronaut & Flight Controller Training
- Space Shuttle Flight Simulator Operations
- Space Station Operations and Utilization
- Flight Crew Equipment, Including Space Suits, Food and so on.
- Mission Control Center Management and Operations

**Johnson Space Center
Houston, TX**

Who We Are



- Vehicle Maintenance, Testing and Launch Operations
- Support U.S. and Trans-Atlantic Emergency Landing Sites
- Ocean Retrieval of Solid Rocket Boosters
- Space Shuttle Logistics Depot - manufacture, repair and procurement of Shuttle hardware and ground support equipment

Kennedy Space Center
Cape Canaveral , FL

VAB Data Center Virtual Tour

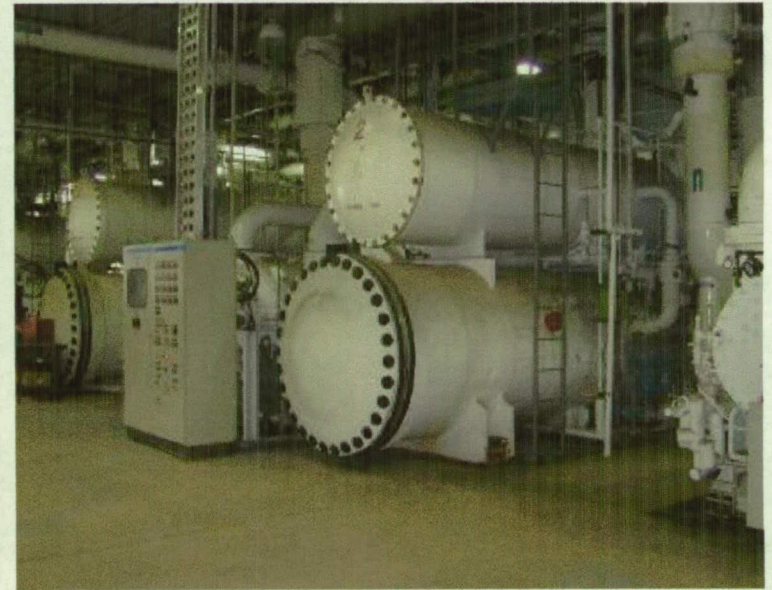


VAB Data Center Virtual Tour



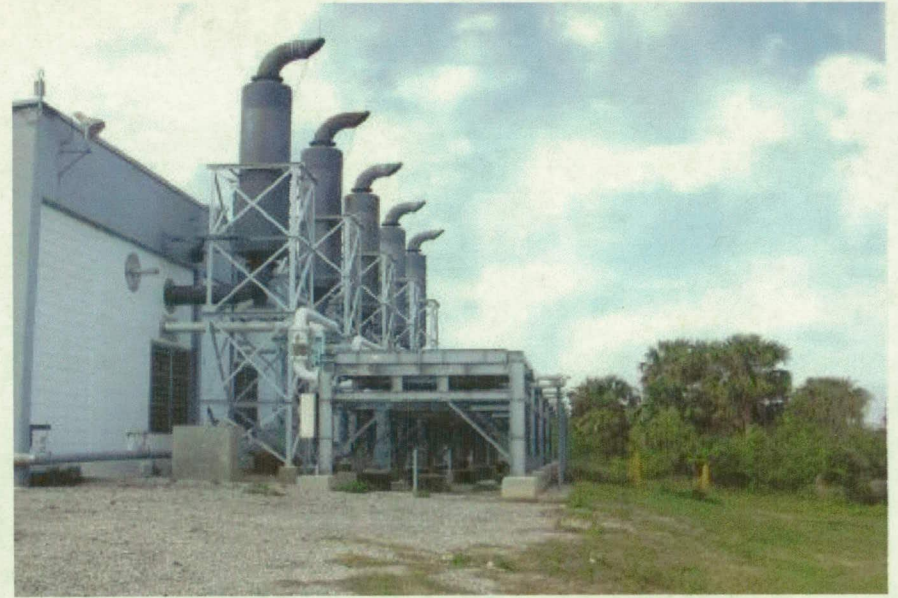
Facilities Overview

Chillers



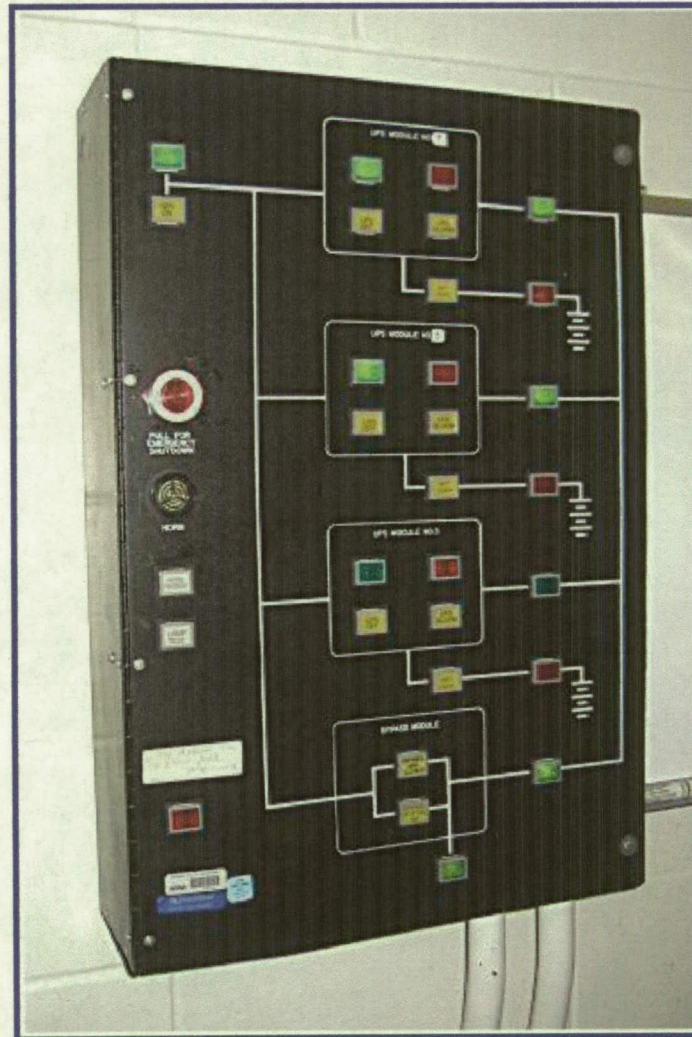
Facilities Overview

Generators



Facilities Overview

UPS Control Panel

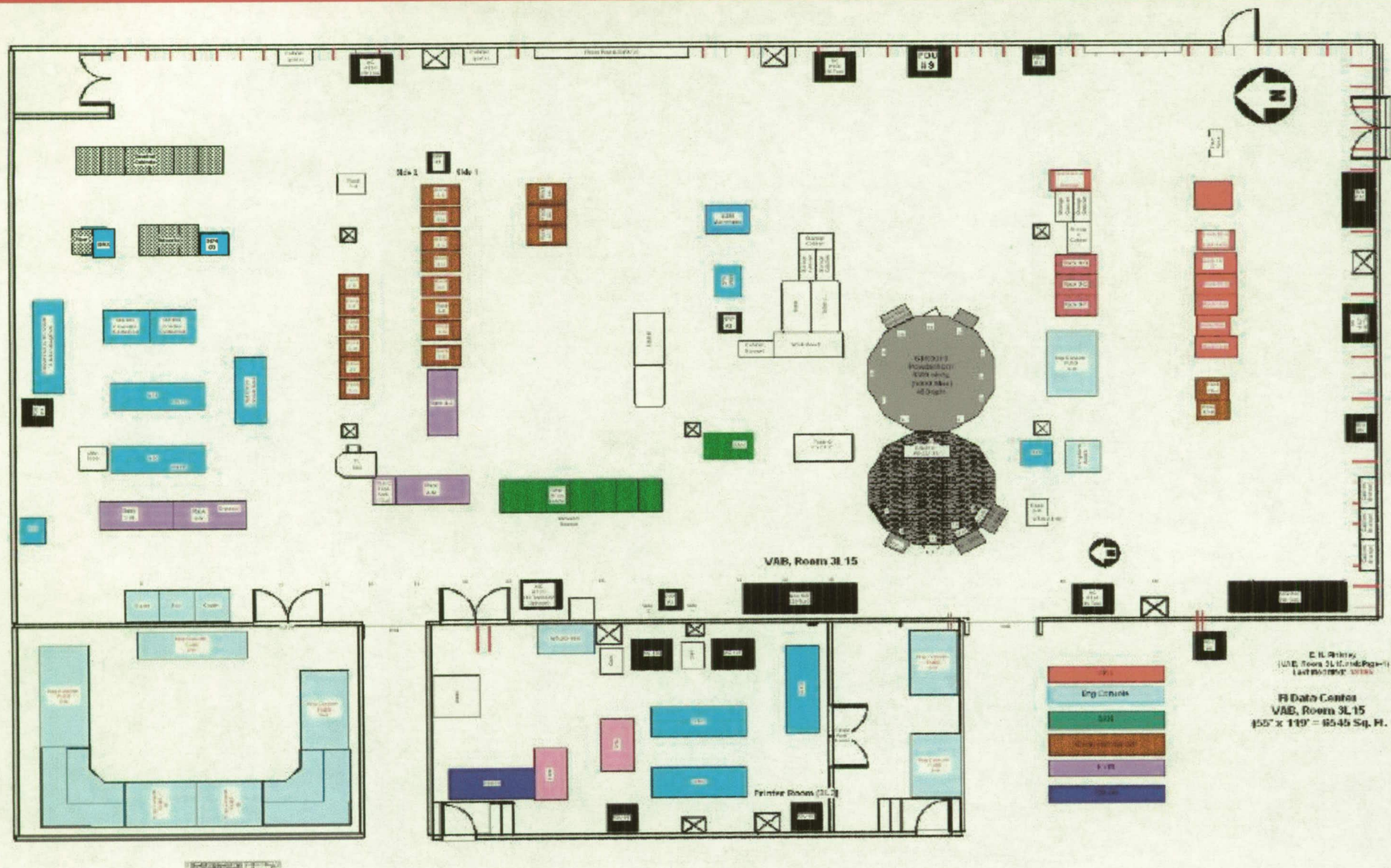


Facilities Overview

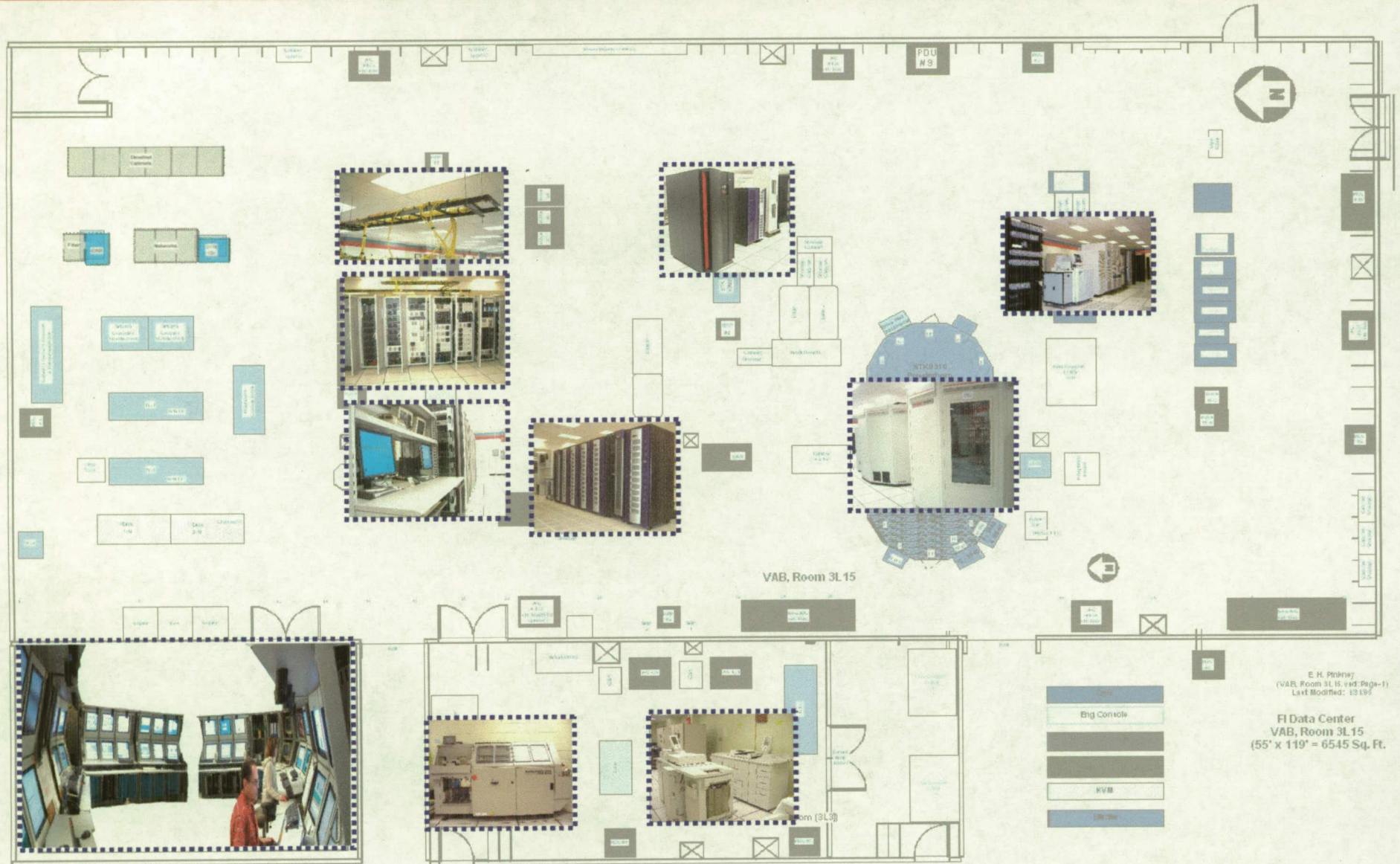
Air Handlers



VAB Data Center Virtual Tour



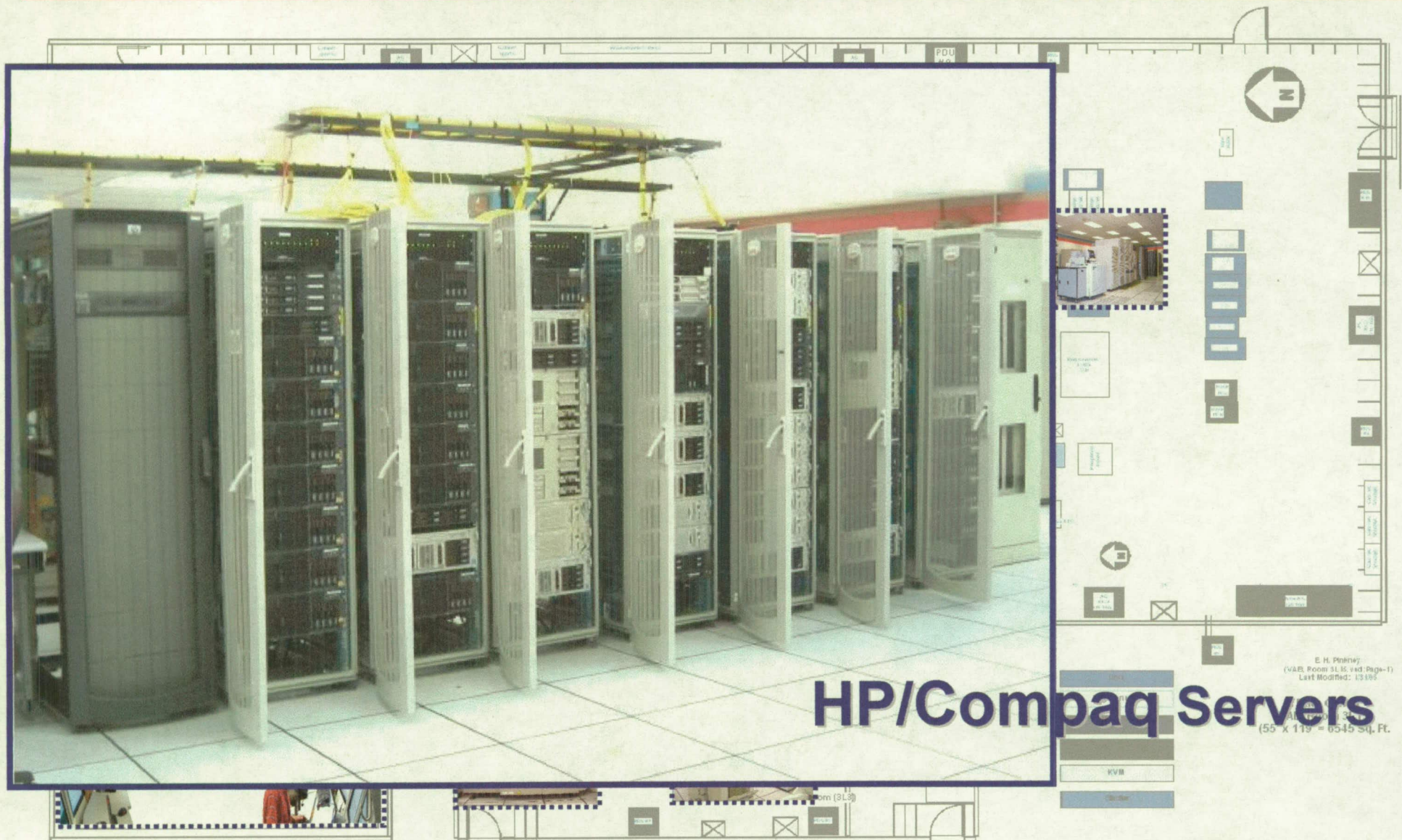
VAB Data Center Virtual Tour



E. H. Pinsky
VAB, Room 3L15, v.1.0
Last Modified: 10/19/05

FI Data Center
VAB, Room 3L15
(55' x 119' = 6545 Sq. Ft.)

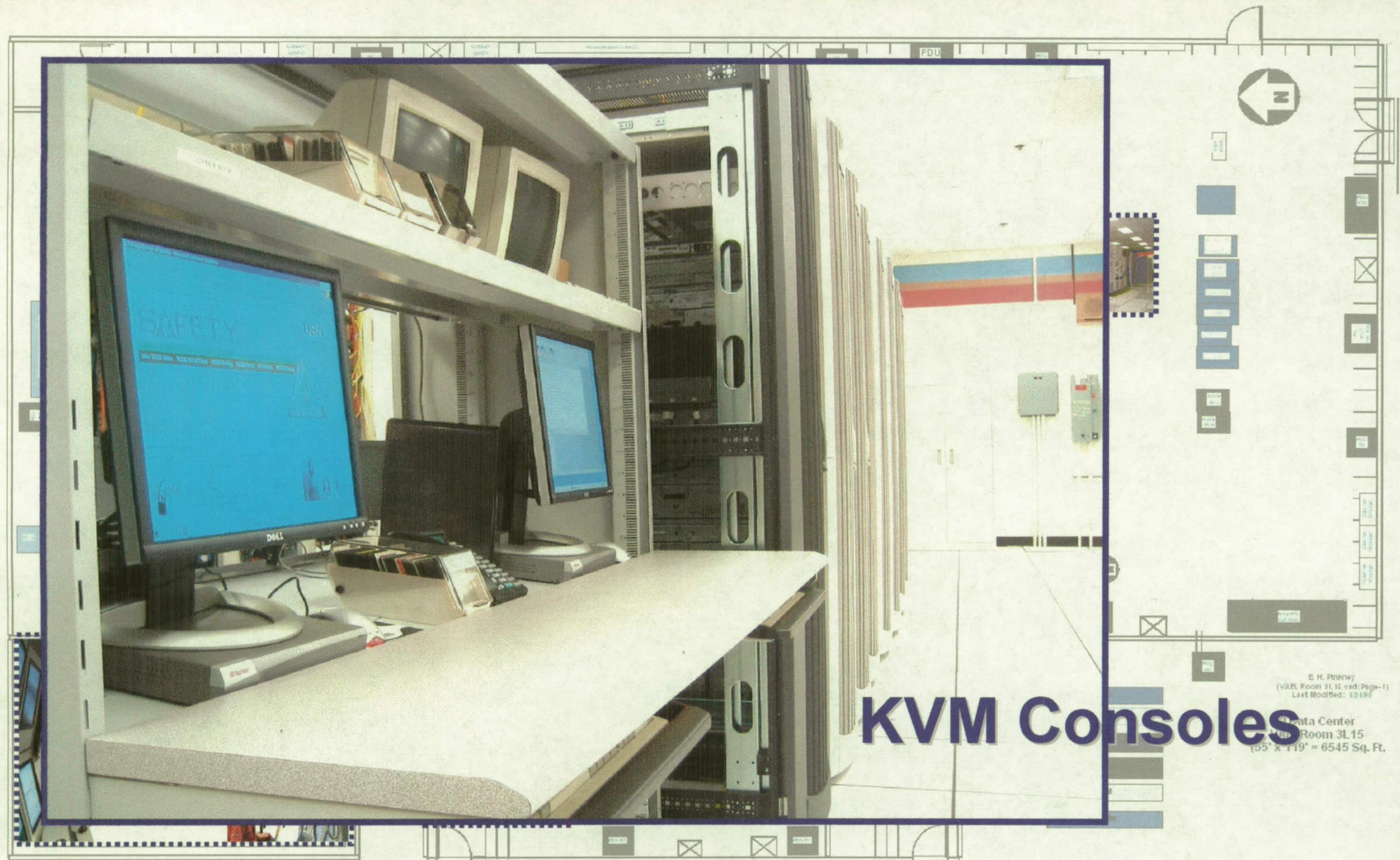
VAB Data Center Virtual Tour



VAB Data Center Virtual Tour



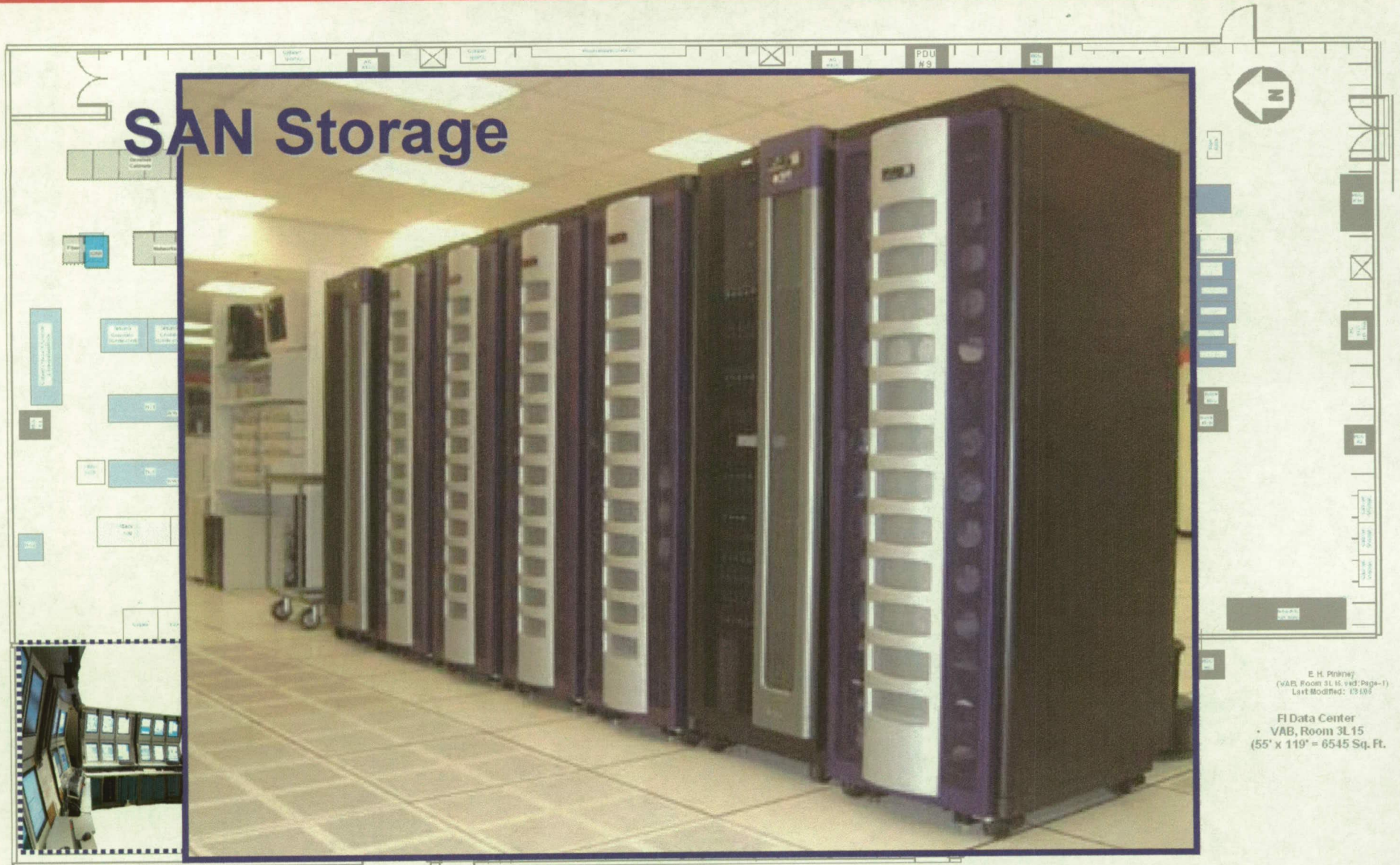
VAB Data Center Virtual Tour



VAB Data Center Virtual Tour



VAB Data Center Virtual Tour



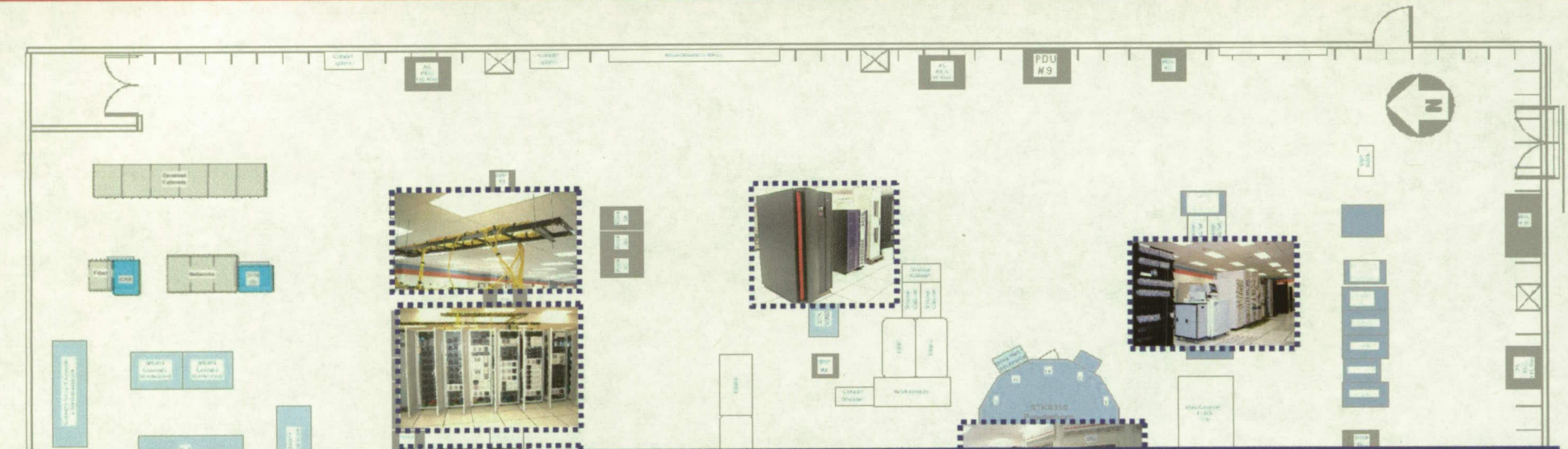
VAB Data Center Virtual Tour



VAB Data Center Virtual Tour



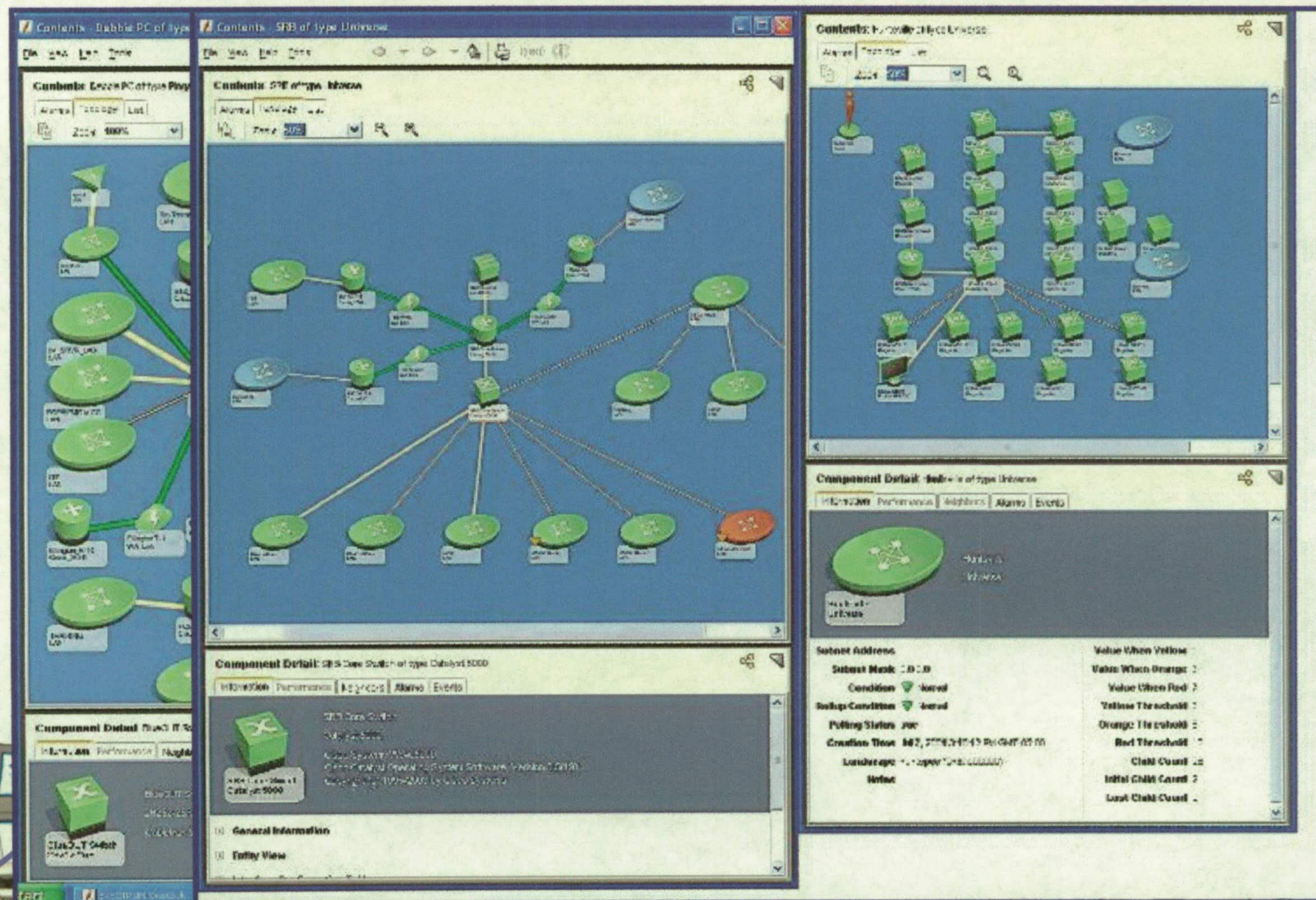
VAB Data Center Virtual Tour



7x24x365 Control Room

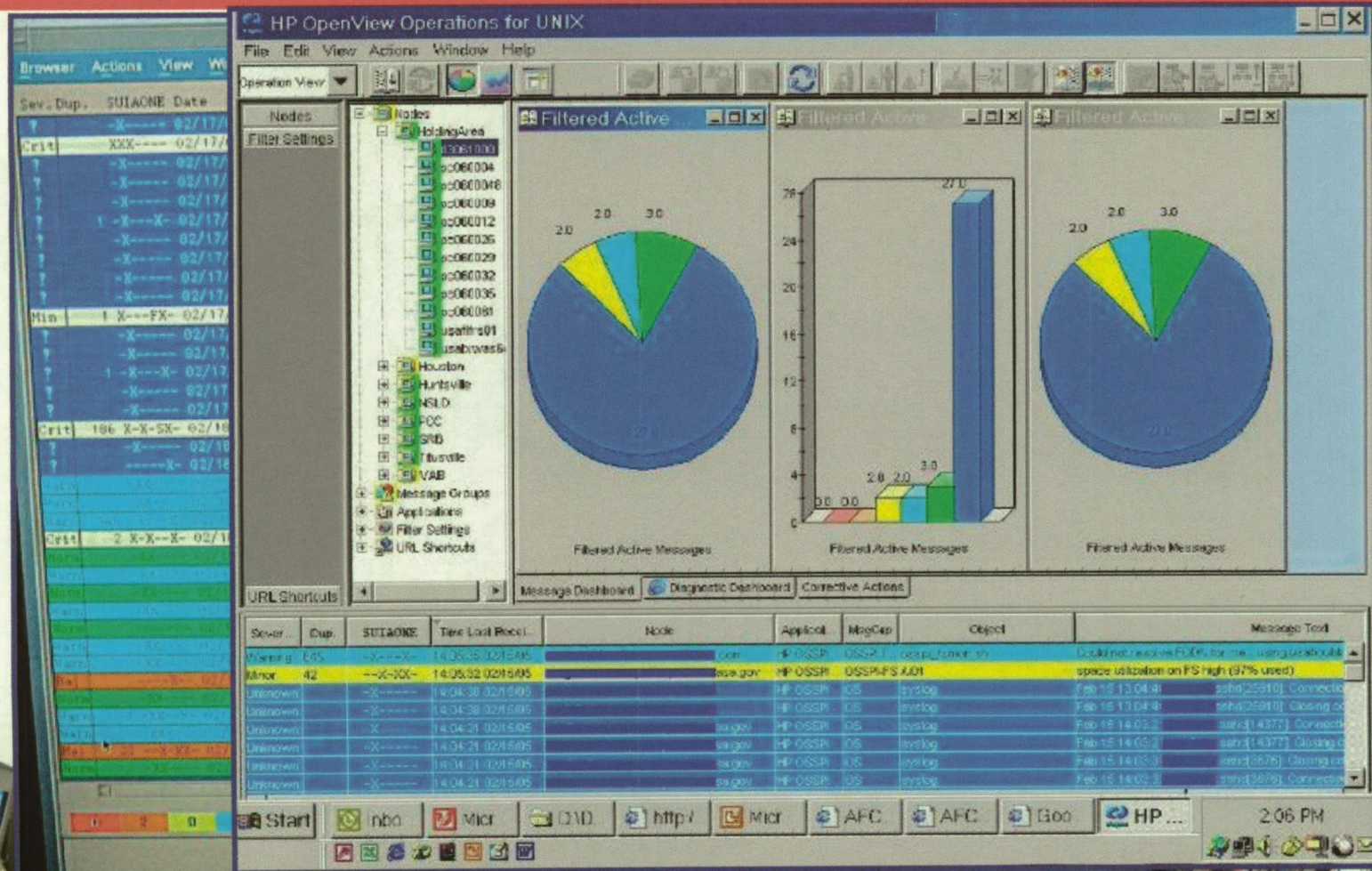


VAB Data Center Virtual Tour



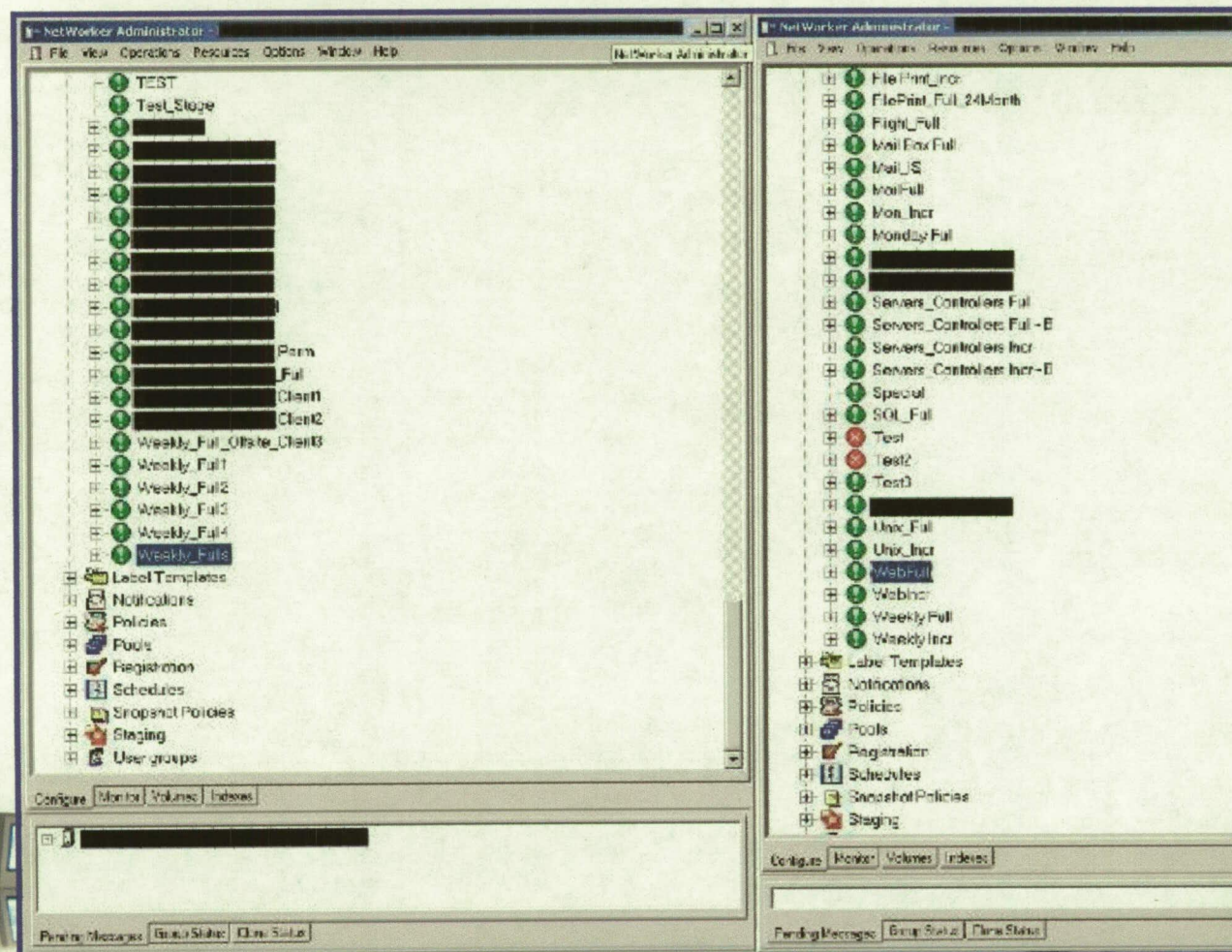
Spectrum Consoles

VAB Data Center Virtual Tour



HP OpenView Operations

VAB Data Center Virtual Tour



Legato Networker Administrator Consoles

VAB Data Center Virtual Tour



Mainframe Consoles

VAB Data Center Virtual Tour

Selection Menu
♦Paragon1664 Page 2/16

No	Ch	Name	Scn
1	009		03
2	010		03
3	011		03
4	012		03
5	013		03
6	014		03
7	015		03
8	016		03

Page FKey Ent Esc
Scr1Lock Scan Skip NCSH

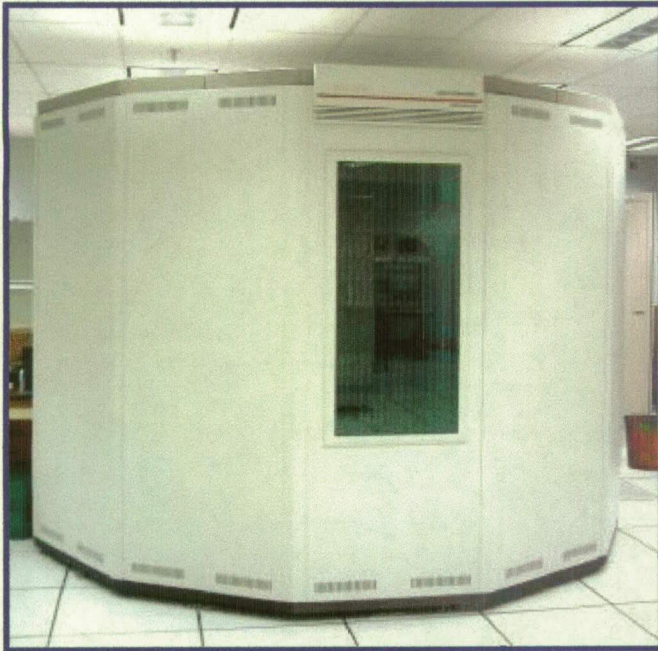
KVM Consoles

Houston Data Center Virtual Tour

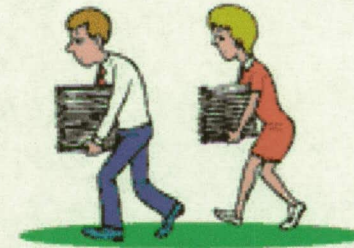
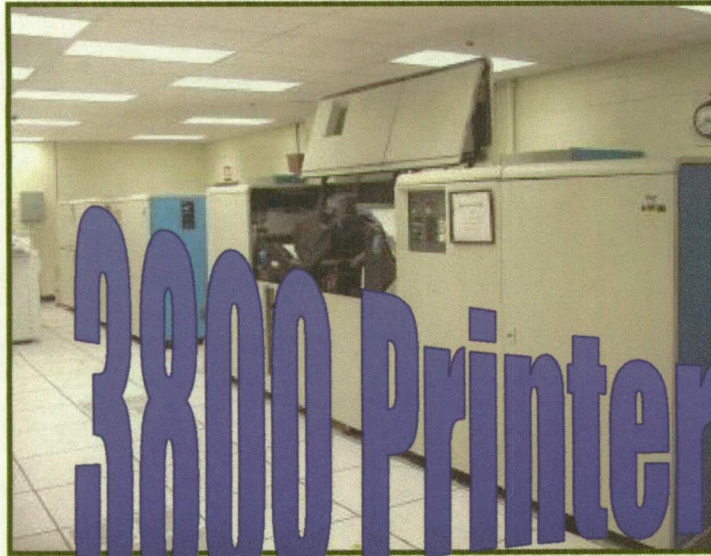
Houston Data Center Virtual Tour



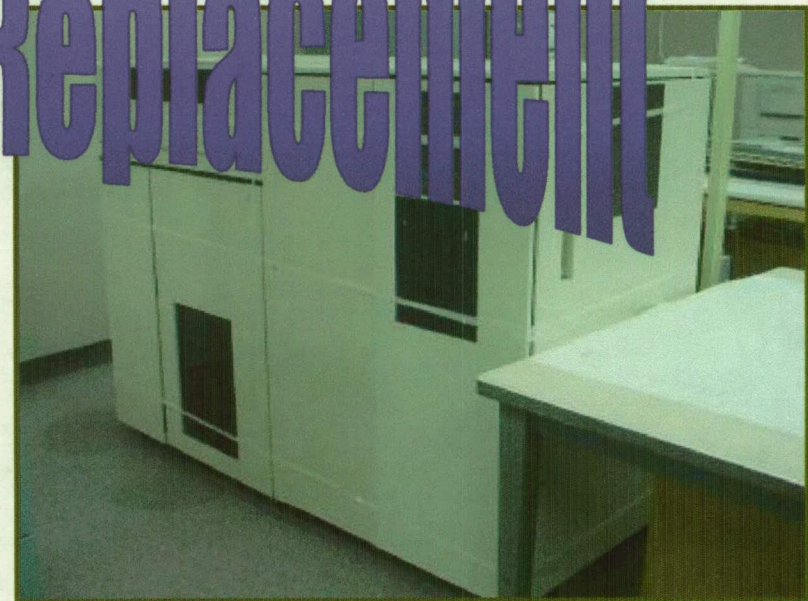
Houston Data Center Virtual Tour



3800 Printer Replacement



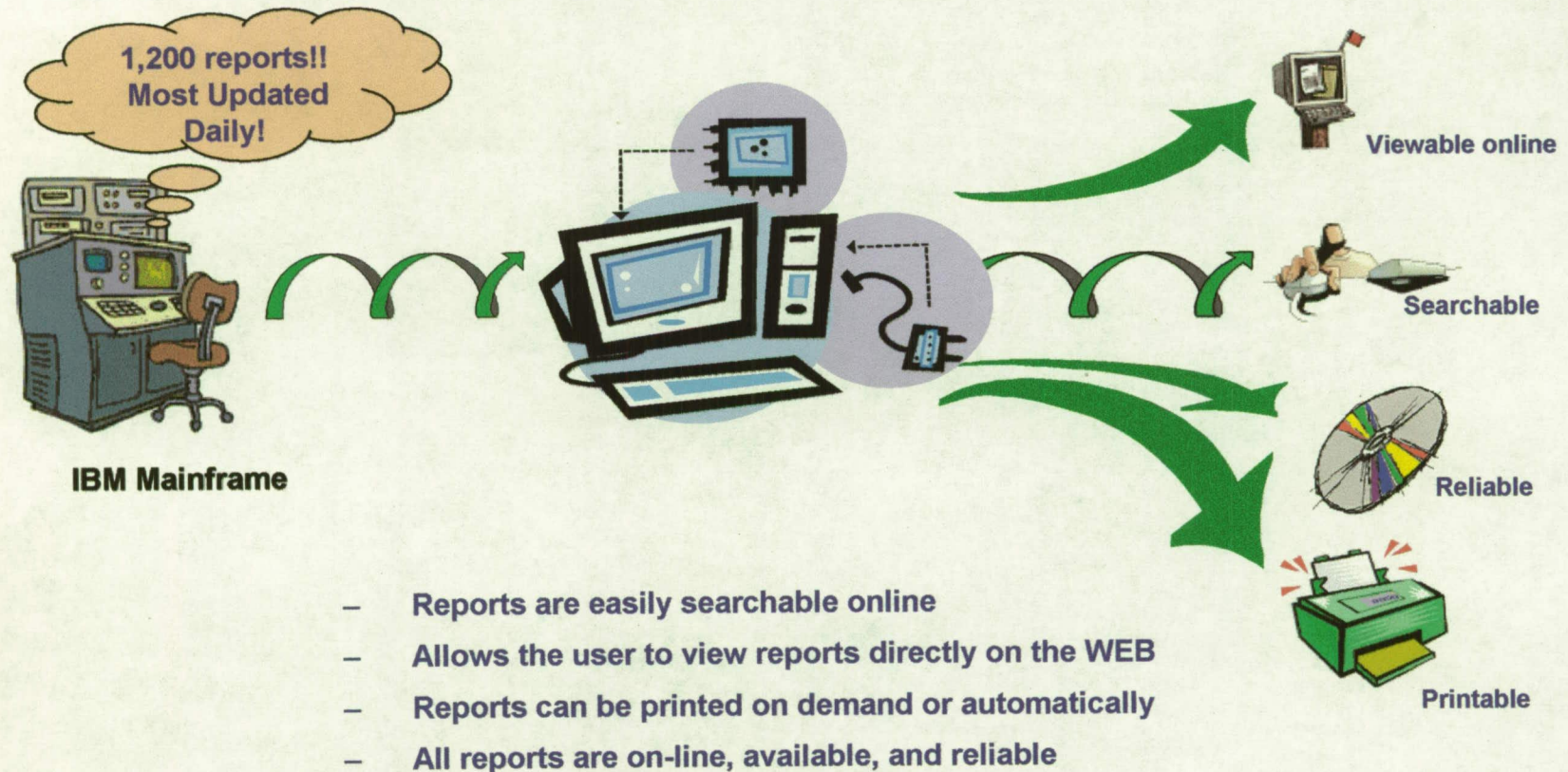
3800 Printer Replacement



3800 Printer Replacement

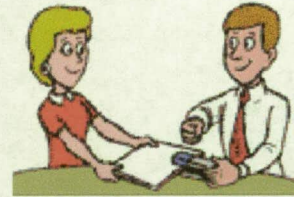
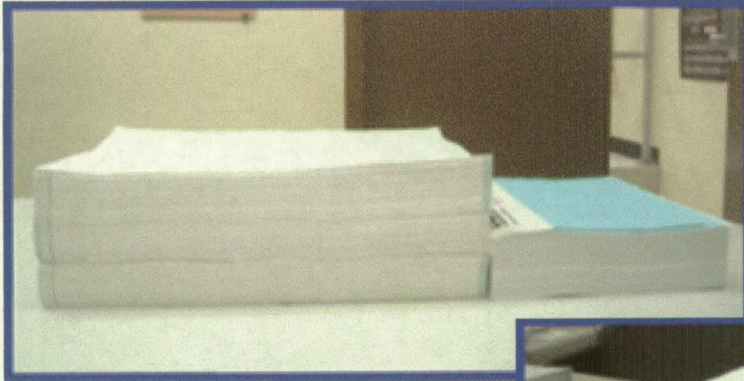
The Solution

A Web-based information management and distribution solution

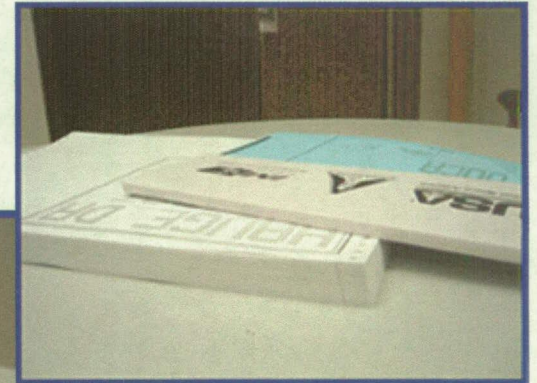


3800 Printer Replacement

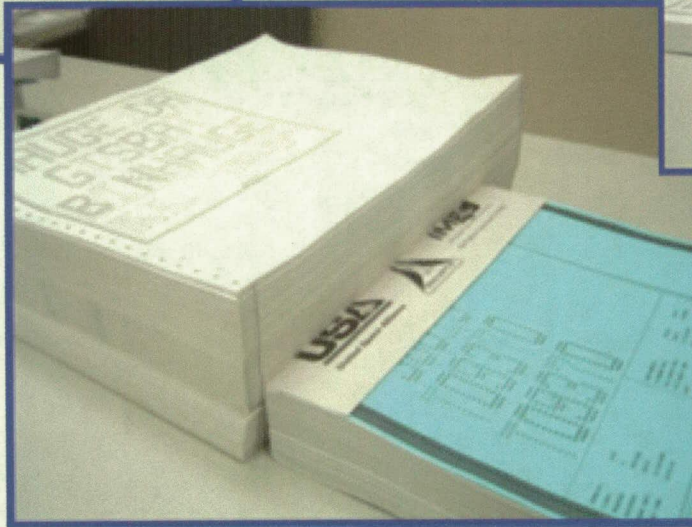
The Solution



Present

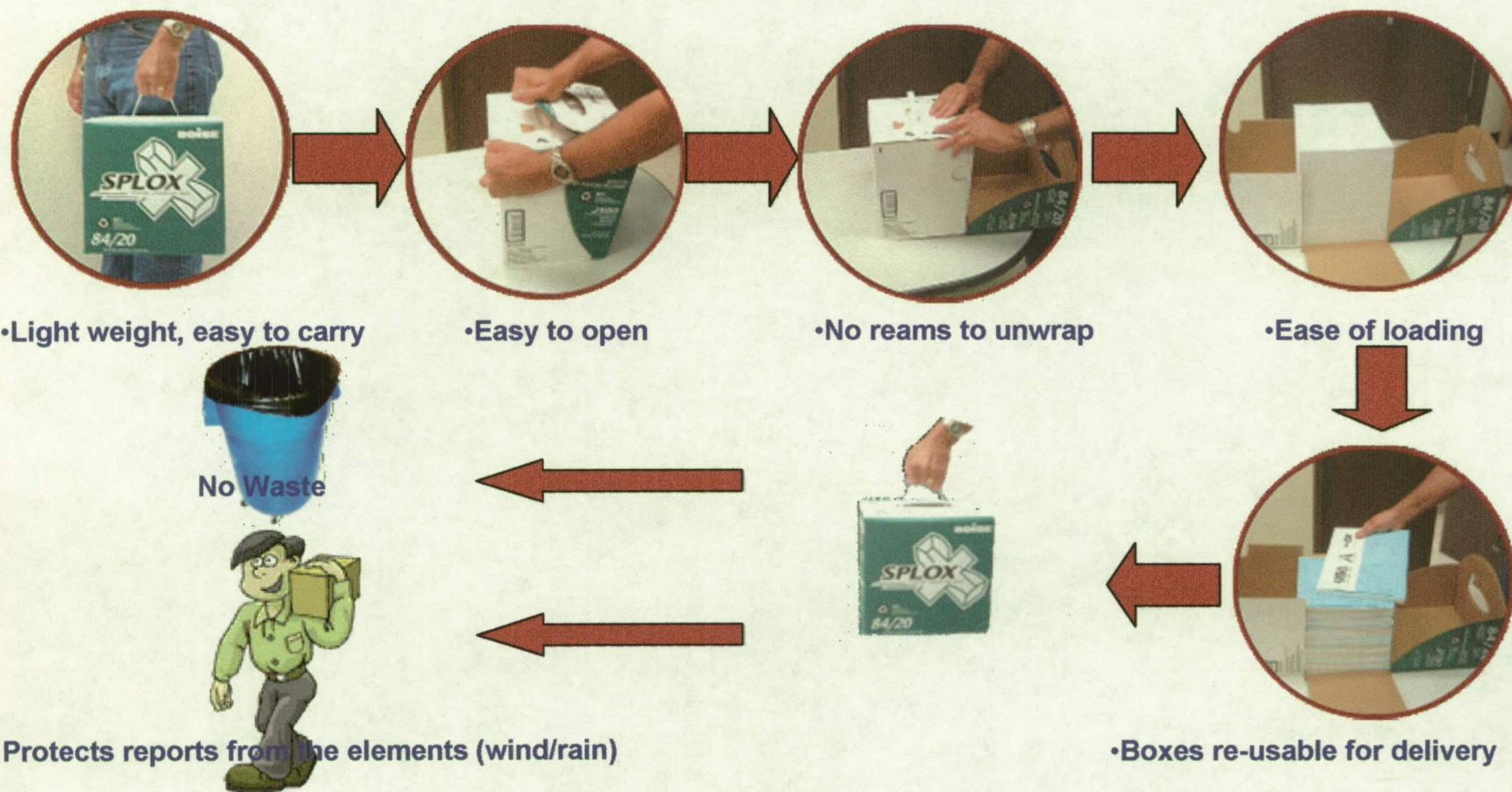


Past



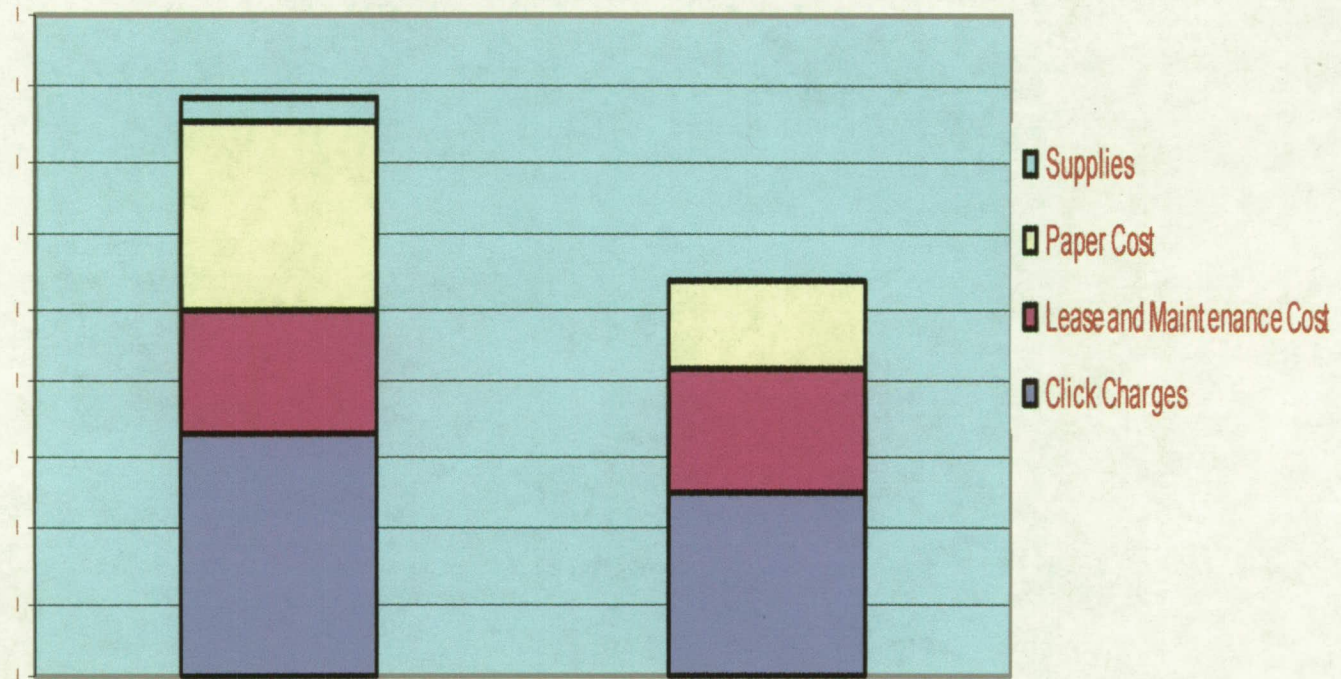
3800 Printer Replacement

Use of SPLOX paper (SPeed Loading bOX)



3800 Printer Replacement

Cost Comparison



3800 Printer Replacement

Printers/Perfect Binder



3 Printers/Copiers

Perfect Binder



3800 Printer Replacement

The Solution

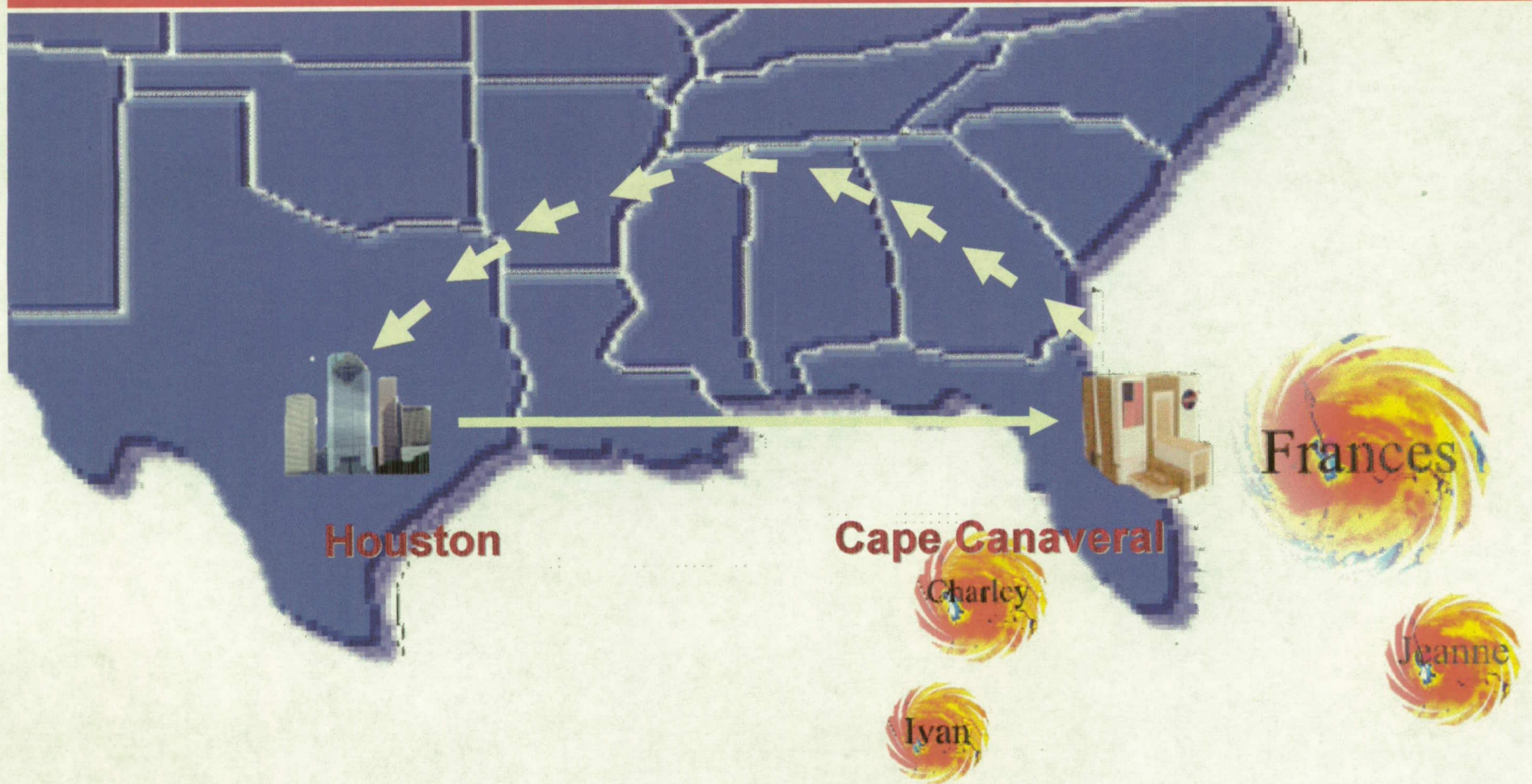
- Three high volume (105ppm) standard cut sheet printers and a Perfect Binder at a central location (VAB Data Center).
 - Use of duplex printing
 - Reduces paper cost by over 60%
 - Reduces recycled waste by 50%
 - Reduces size/weight of reports by over 50%
 - Reports under 200 pages are automatically stapled (85% of the reports)
 - Reports over 200 pages are bound using “Perfect Binder”
 - “Open Solution” which provides printing/copying/binding for any application, not limited to supporting the IBM Mainframe
 - New capabilities can provide professional publications/books



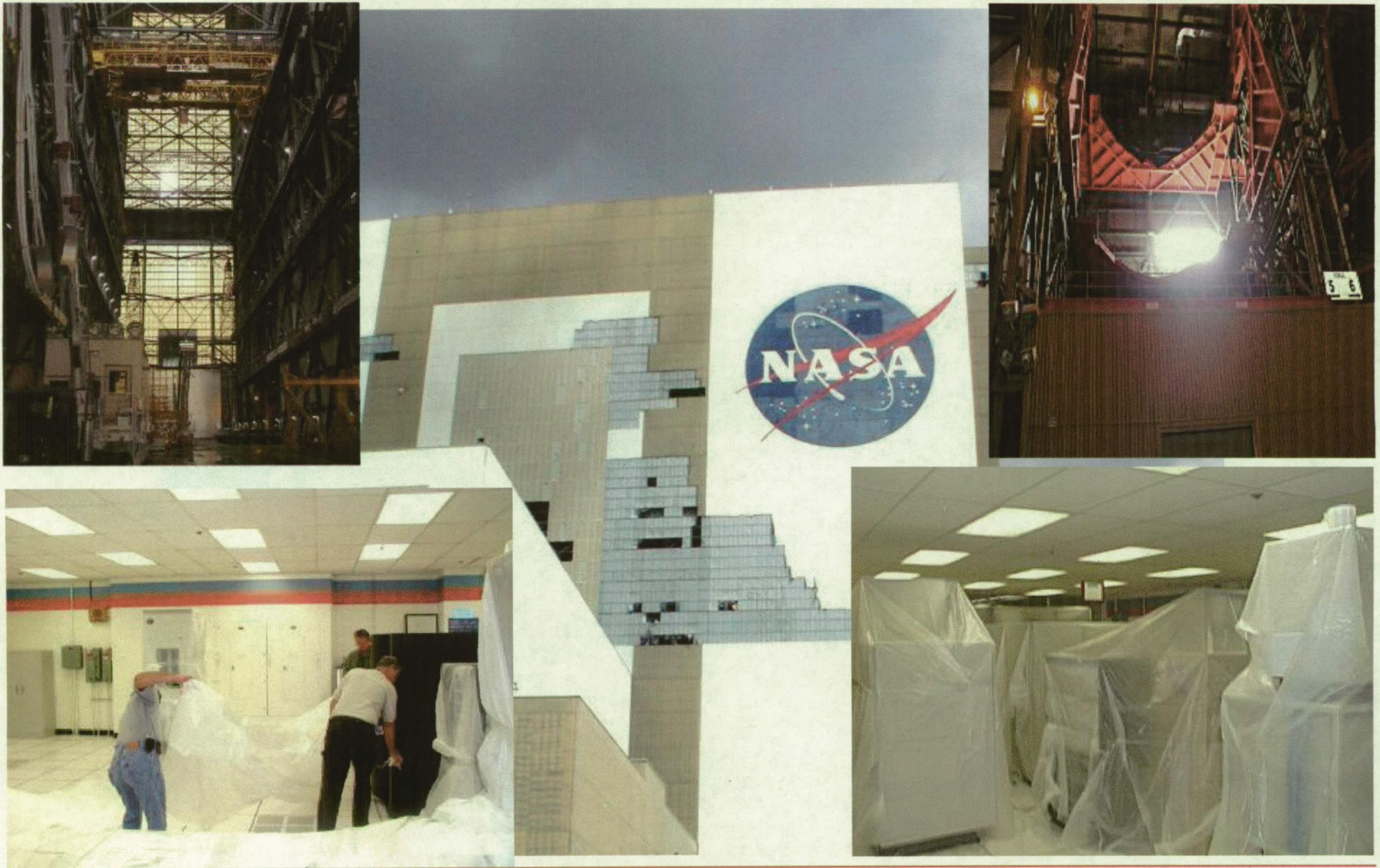
Disaster Recovery



Disaster Recovery



Disaster Recovery



Next Shuttle Launch



Next Shuttle Launch

Discovery (OV-103)

Mission: STS-114 - 17th ISS(International Space Station) Flight (LF1) - Multi-Purpose Logistics Module

Vehicle: Discovery (OV-103)

Location: Launch Pad 39B

Launch Date: Launch Planning Window May 15 - June 12, 2005

Commander: Eileen Collins

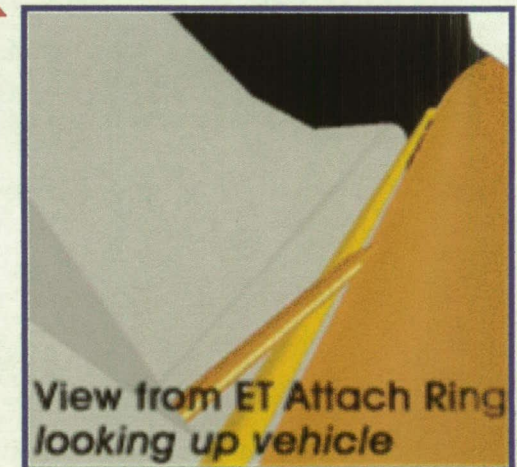
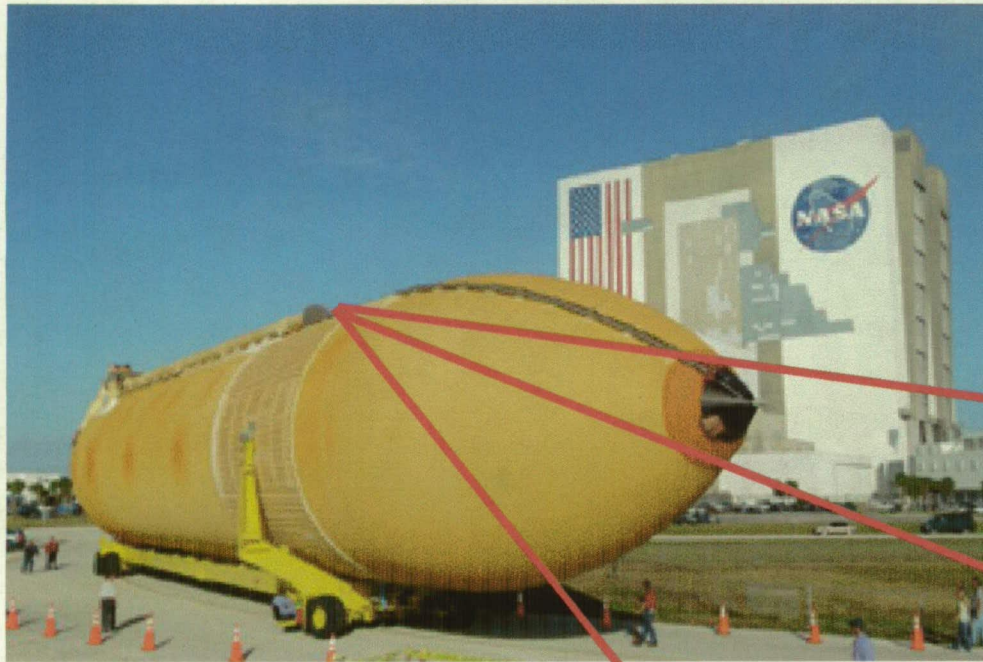
Pilot: James Kelly

Mission Specialist : Soichi Noguchi, Steve Robinson, Andy Thomas, Wendy Lawrence , Charlie Camarda

Next Shuttle Launch

•External Tank

Moved into VAB on Jan 5, 2005



Next Shuttle Launch



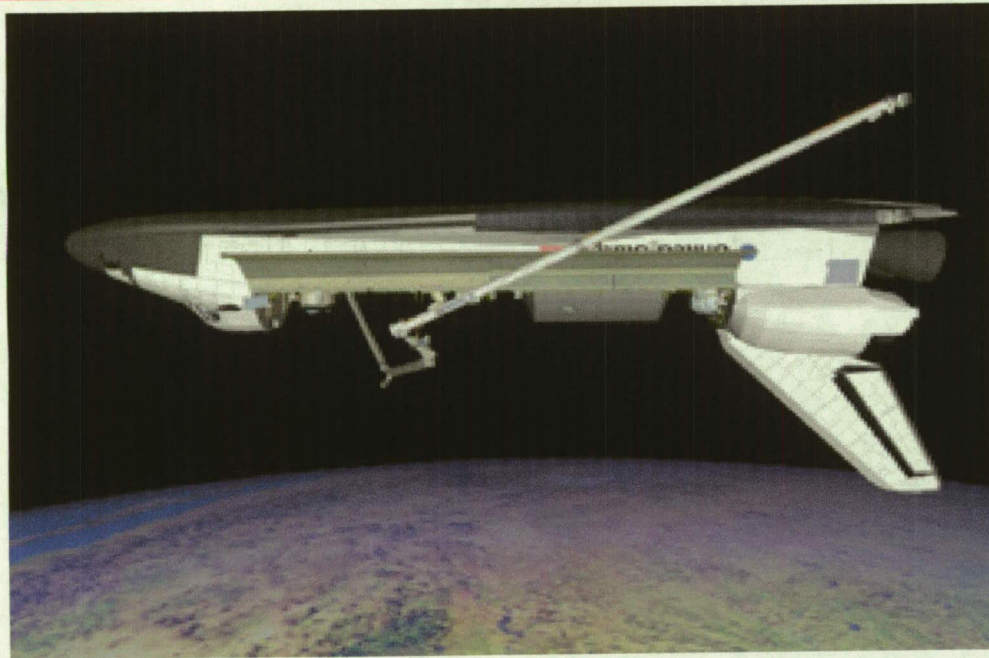
- External Tank

- Solid Rocket Boosters

Stacked and mated with External Tank
on Feb 28, 2005



Next Shuttle Launch



- External Tank
- Solid Rocket Boosters
- Space Shuttle



United Space Alliance

Space Transportation System Orbiter

